AMENDMENT TO THE CLAIMS

Claim 1 (Currently Amended) A frame generating method comprising:

inserting a synchronous word into data at a position in order to generate a frame, the position being determined based on a known time "t" of a noise cycle of a transmission line ~~in order to generate a frame~~, the known time "t" of the noise cycle being a measurement of time between an occurrence of cyclical noises on the transmission line; and

transmitting the generated frame from a transmitter to a receiver via the transmission line,

wherein the cyclical noises occur at every time "t" in the data, and

wherein a length of the synchronous word is approximately equal to a multiple of a length of the noise cycle by a natural number.

Claim 2 (Previously Presented) A frame generating method as recited in claim 1, wherein said position is arranged according to a predetermined arrangement algorithm.

Claim 3 (Previously Presented) A frame generating method as recited in claim 2, wherein a parameter of the predetermined arrangement algorithm comprises at least one of a length of the synchronous word and an arrangement interval of the synchronous word.

Claim 4 (Cancelled)

Claim 5 (Currently Amended) A frame generating method comprising:

inserting a plurality of synchronous words into data at a position in order to generate a frame, the position being determined based on a known time "t" of a noise cycle of a transmission line ~~in order to generate a frame~~, the known time "t" of the noise cycle being a measurement of time between an occurrence of cyclical noises on the transmission line; and

transmitting the generated frame from a transmitter to a receiver via the transmission line,

wherein the cyclical noises occur at every time "t" in the data, and

wherein a length of each synchronous word is approximately equal to a multiple of a length of the noise cycle by a natural number.

Claim 6 (Previously Presented) A frame generating method as recited in claim 5, wherein said inserting a plurality of synchronous words into data arranges the plurality of synchronous words over a section of frame as long as the noise cycle.

Claim 7 (Previously Presented) A frame generating method as recited in claim 5, wherein a length of an arrangement interval of at least two of the plurality of synchronous words is different from a length of the noise cycle.

Claim 8 (Previously Presented) A frame generating method as recited in claim 5, wherein at least two of the plurality of synchronous words are arranged using the same pattern.

Claim 9 (Previously Presented) A frame generating method as recited in claim 1, wherein a length of the noise cycle is the length of a time interval whose noise level in the transmission line is beyond a predetermined threshold.